



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-9120; Directorate Identifier 2016-CE-024-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; M7 Aerospace LLC**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all M7 Aerospace LLC Models SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes. This proposed AD was prompted by corrosion and stress corrosion cracking of the pitch trim actuator upper attach fittings of the horizontal stabilizer front spar. This proposed AD would require repetitive inspections of the pitch trim actuator upper attach fittings for corrosion and/or cracking in the bolt holes and the web/flange radius with replacement of fittings as necessary. We are proposing this AD to prevent jamming and/or loss of control of the horizontal stabilizer, which could result in partial or complete loss of airplane pitch control.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact M7 Aerospace LLC, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: <http://www.elbitsystems-us.com>; email: [MetroTech@M7Aerospace.com](mailto:MetroTech@M7Aerospace.com). You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9120; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; email: [andrew.mcanaul@faa.gov](mailto:andrew.mcanaul@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-9120; Directorate Identifier 2016-CE-024-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We received reports of multiple SA226 and SA227 airplanes with corrosion and/or stress corrosion cracks in the pitch trim actuator upper attach fittings of the horizontal stabilizer front spar. This condition, if not corrected, could result in jamming and/or loss of control of the horizontal stabilizer with consequent partial or complete loss of airplane pitch control.

### **Related Service Information under 1 CFR part 51**

We reviewed M7 Aerospace LLC Service Bulletin (SB) 226-27-081 R1, M7 Aerospace LLC SB 227-27-061 R1, and M7 Aerospace LLC SB CC7-27-033 R1, all Issued: April 13, 2016 and Revised: June 27, 2016. The service information describes procedures for detailed visual, liquid penetrant, ultrasound and high frequency eddy current inspections of the pitch trim actuator upper attach fittings for corrosion and cracking in the bolt holes and the web/flange radius, and replacement if necessary. This

service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

### **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously.

### **Costs of Compliance**

We estimate that this proposed AD affects 300 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspect pitch trim actuator upper attach fittings	16 work-hours X \$85 per hour = \$1,360	Not Applicable	\$1,360	\$408,000

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these replacements:

#### **On-condition costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Replace 2 fittings	8 work-hours X \$85 per hour = \$680	\$4,900	\$5,580

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**M7 Aerospace LLC:** Docket No. FAA-2016-9120; Directorate Identifier 2016-CE-024-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to M7 Aerospace LLC Models SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes, all serial numbers, certificated in any category.

#### **(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 5510, Horizontal Stabilizer Structure.

**(e) Unsafe Condition**

This AD was prompted by corrosion and stress corrosion cracking of the pitch trim actuator upper attach fittings of the horizontal stabilizer front spar. We are issuing this AD to prevent jamming and/or loss of control of the horizontal stabilizer, which could result in partial or complete loss of airplane pitch control.

**(f) Compliance**

Comply with paragraphs (g)(1) and (2) of this AD using the following service bulletins and within the compliance times specified, unless already done:

(1) For Models SA226-AT, SA226-T, SA226-T(B), and SA226-TC: M7 Aerospace LLC Service Bulletin (SB) 226-27-081 R1, Issued: April 13, 2016 and Revised: June 27, 2016; or

(2) For Models SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), and SA227-TT: M7 Aerospace LLC SB 227-27-061 R1, Issued: April 13, 2016 and Revised: June 27, 2016; or

(3) For Models SA227-CC and SA227-DC (C-26B): M7 Aerospace LLC SB CC7-27-033 R1, Issued: April 13, 2016 and Revised: June 27, 2016.

**(g) Actions**

(1) Within the next 600 hours time-in-service (TIS) after the effective date of this AD or within the next 12 months after the effective date of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed every 5,000 hours TIS or 5 years, whichever occurs first, perform the inspection of the pitch trim actuator upper attach fittings following section 2.A. and return to service following section 2.C. of the Accomplishment Instructions of the service bulletins identified in paragraphs (f)(1), (2), or (3) of this AD, as applicable.

(2) If any corrosion or cracks are found as a result of any inspection in paragraph (g)(1) of this AD, before further flight, replace the fitting following section 2.B. and return to service following section 2.C. of the Accomplishment Instructions of the service bulletins identified in paragraphs (f)(1), (2), or (3) of this AD, as applicable.

**(h) Credit for Actions Accomplished in Accordance with Previous Service Information**

This proposed AD allows credit for inspection or replacement of the pitch trim actuator upper attach fittings required in paragraph (g)(1) and (2) of the AD, if done before the effective date of this AD, following the procedures in the Accomplishment Instructions of the applicable service information listed in paragraphs (h)(1) through (3) of this AD:

(1) For Models SA226-AT, SA226-T, SA226-T(B), and SA226-TC: M7 Aerospace LLC Service Bulletin (SB) 226-27-081, Issued: April 13, 2016; or

(2) For Models SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), and SA227-TT: M7 Aerospace LLC SB 227-27-061, Issued: April 13, 2016; or

(3) For Models SA227-CC and SA227-DC (C-26B): M7 Aerospace LLC SB CC7-27-033, Issued: April 13, 2016.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Fort Worth Airplane Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (i) of this AD.



(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

(1) For more information about this AD, contact Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; email: [andrew.mcanaul@faa.gov](mailto:andrew.mcanaul@faa.gov).

(2) For service information identified in this AD, contact M7 Aerospace LLC, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: <http://www.elbitsystems-us.com>; email: [MetroTech@M7Aerospace.com](mailto:MetroTech@M7Aerospace.com). You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.  
Issued in Kansas City, Missouri, on September 1, 2016.

Pat Mullen,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.

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